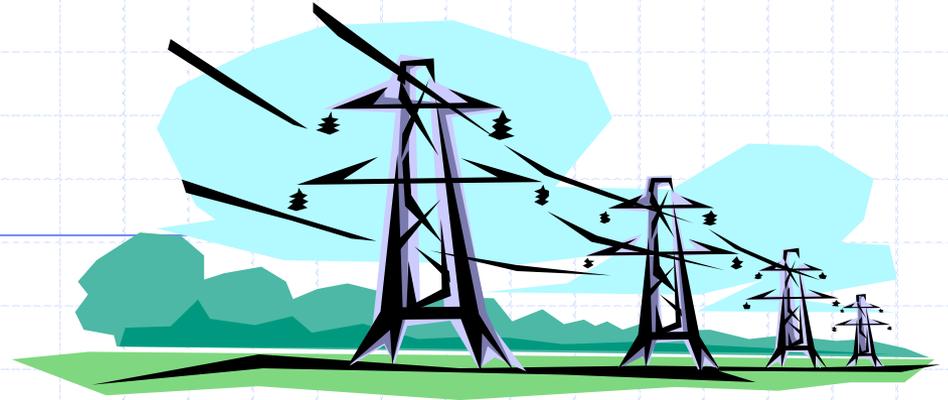


DEMEC

Delaware Municipal Electric Corporation



**Energy Efficiency
Advisory Council
January 14, 2015**

DEMEC Overview

- ◆ DEMEC is a joint action Public Power utility incorporated as a not-for-profit Delaware corporation in 1979, members include nine municipal distribution utilities in Delaware
- ◆ Eight of the members receive 100% of their requirements from DEMEC through Full Requirements take-or-pay contracts and seven participate in DEMEC's existing Beasley Generation Project
- ◆ DEMEC's power supply comes from a portfolio of existing self-supply generation assets, staggered short, medium, and long term power contracts, and spot purchases.

Full-Requirements Members

- Clayton
- Milford
- Newark
- New Castle
- Middletown
- Smyrna
- Seaford
- Lewes (6/1/2012)

Partial Requirements Member

- Dover





The Public Power Business Model

Public Ownership by Our Communities – The customers are the owners.

Local Control – decisions making in the best interest of our communities by our local community leaders in an open democratic process.

Nonprofit Operation – all the money stays in your communities.

High Reliability – Not just Luck! A strong emphasis on system maintenance and service reliability results in exceptional service reliability. Remember Sandy!

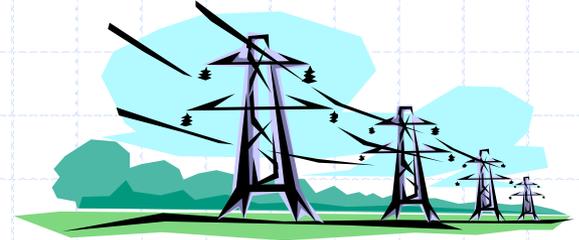
Low-cost Financing Structure – lower cost capital and operating expenses.

Customer Focused Orientation – Most importantly, it is all about the local customer and the community needs.

Peak Reduction

- ◆ Reducing peak loads saves money by reducing the capacity costs of the utility.
- ◆ DEMEC members reduce peaks using both supply and demand side approaches with both carbon and carbon free resources

Traditional Energy



- Municipals collectively own and operate diverse resources both in and outside of Delaware
- Reliable and well sited generation helps reduce peak energy costs for DEMEC and its members
- DEMEC invests in state of the art natural gas facilities that provide clean and reliable energy when its needed
- Adding cleaner generation resources provides further diversity to the resource mix

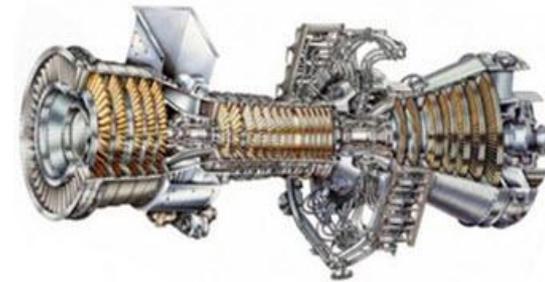
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Beasley Power Station - Unit #2

Smyrna, DE



DEMEC – Existing Facility Expansion

- Beasley Power Station; Total Capacity 100MW
 - Unit #1 – 50MW Commissioned April 2001
 - Unit #2 – 50MW Operational June 1, 2012
- Plant Configuration - (2) GE LM6000 combustion turbines, fueled by Natural Gas or #2 Fuel Oil as a backup.
- The Beasley Power Station is primarily a peaking unit operated to save costs during high periods of energy demand; however, the plant can be called upon by PJM for system reliability and with its black start capability the plant may be used for system restoration.
- The Beasley Power Station has the capability to provide island operation with the Town of Smyrna and has demonstrated this ability on several occasions.
- Beasley Power Station meets DEMEC's long term goals of providing predictable, reliable, low cost power through a diversified power supply portfolio which includes owner assets.
- DEMEC's 7 full requirement members benefit from the output and capacity of the facility.

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AMP Fremont Energy Center (AFEC)

Fremont, Ohio



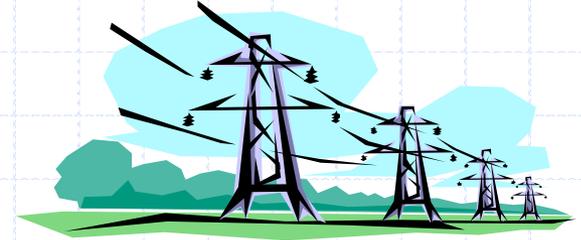
DEMEC Partners with American Municipal Power (AMP)

- July 2011 DEMEC is the 129th member to join the public power partners of American Municipal Power (AMP). Including DEMEC, there are 89 participants in the AFEC Project.
- AFEC is a natural gas-fired combined cycle electric generating facility which will supply intermediate power to participating communities. Intermediate power is needed Monday – Friday during the 16 highest demand hours.
- AFEC's approved capacity injection rights = 675MW; 512MW intermediate and 163MW during peak demands.
- Plant Configuration:
 - (2) 180MW ea. Siemens Combustion Turbine Generators
 - (1) 360MW Siemens Steam Turbine Generator
- DEMEC will take 70 MW of intermediate energy and capacity and 22MW of peaking energy and capacity from the facility for a term of 35 years.
- The Project provides DEMEC and its members a cost-effective, safe, environmentally friendly, asset-based alternative to wholesale energy and capacity markets.

Fremont, Ohio



Renewables



- Municipals voluntarily joined the statewide renewable efforts
- 2013 was the first year of the Municipal RPS program and DEMEC met the same requirement as the state statute requirement for Delmarva
- Municipal RPS goals are 25% renewables in the power portfolio by 2025, with 3.5% of portfolio specifically from solar generation resources
- DEMEC is investing in several renewable technologies
- Adding non-carbon generation resources provides further diversity to the resource mix

DEMEC



Delaware Municipal Electric Corporation



The Dover SUN Park is a 10 MW utility scale facility located in the Dover-owned Garrison Oak Technology Park. The park was made possible by the partnership of several utilities:

- City of Dover
- Delaware Municipal Electric Corporation (DEMEC)
- Delmarva Power
- Delaware Sustainable Energy Utility (SEU)
- LS Power

DEMEC – Supporting a Solar Portfolio

Target:	3 1/2% by 2025
SRECs:	DEMEC will receive 15 % of the Solar Renewable Energy Credits (SRECs).
Projections:	Dover SUN Park will only provide a portion of DEMEC's needed solar environmental attributes. More is required.
Term:	20 years
Societal Benefits:	Will provide clean power to 1,300 homes
Operational:	June 2011



Costs: Seeking the best value for the customer, the park uses the most cost effective technology available today. Additionally, community-scale solar projects offer the most cost effective method to meet solar power goals – over 2,000 solar rooftop systems would be required to supply the same amount of clean energy of the Project at more than double the cost.



Milford Solar Project



The 80-acre Milford Solar Project, which went into commercial operation late in 2012, uses approximately 62,000 crystalline-silicon solar panels to generate 13 MW, enough solar energy to power approximately 9,000 homes when the sun is shining.

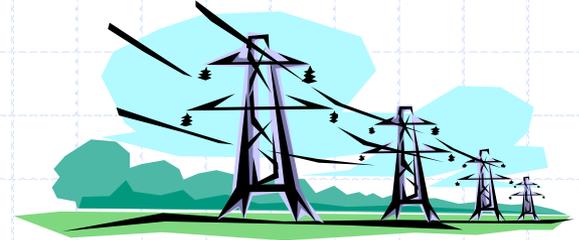
Project will have significant economic benefit to the Milford Area:

- Injected up to \$2 million into the Milford local economy
- Employed in excess of 150 local workers
- Utilized Delaware labor force for more than 75% of construction.
- DEMEC will use 100% of the project energy and a schedule of SREC output for a 20 year term.



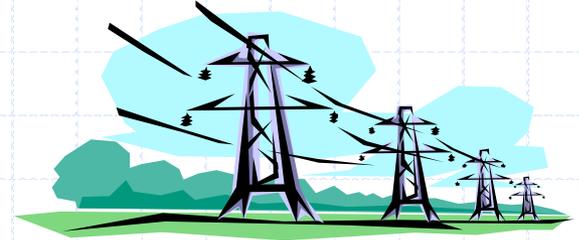


Demand Side Approach



- **Partnered with a Curtailment Services Provider**
- **Engaged DEMEC customers to reduce load during PJM Emergency Hours and DEMEC 5 Coincident Peak Hours**
- **DEMEC has enrolled almost 7 MW of load reducing capacity through C&I customers contracts which have provided over \$700,000 worth of incentives back to participants**

Future Projects



- Hydroelectric Generation
- Additional Peaking Generation in Southern Delaware
 - Cleaner peaking and mid-level generation in the southern part of Delaware is desired, however, it will likely require cooperative investment between multiple parties to make the natural gas pipeline a reality
- Additional Behind-the-meter Generation in our member communities

Energy Efficiency Investments

- ◆ Reducing kilowatt-hours (kwhs) while still maintaining productivity saves energy and reduces customer costs.
- ◆ DEMEC members reduce kwhs through education and incentive programs

Energy Efficiency Connections

- ◆ Enrolling customer in PJM Energy Efficiency Market
Qualified 3 Customers in 2014
- ◆ Connected many qualifying C&I customers with the
University of Delaware Industrial Assessment Center
- ◆ Made DEMEC's website a one-stop resource for
residential customers to learn about home energy
savings through self-directed assessments

Energy Efficiency Investments

◆ ARRA Direct Incentives to Municipalities

- Installed LED Streetlights
- Building Envelope Retrofits
- HVAC Upgrades

◆ Green Energy Program

- Customer Education Brochures
- CFL Light Give Away
- HVAC Upgrades
- Energy Auditing Equipment

Energy Efficiency (TBD)

◆ ARRA Incentives through SEU

- Supported variety of programs
- All sectors involved

◆ State Incentives

- Energy Efficiency Investment Fund
- Residential Energy Efficiency Loan Program
- Weatherization Assistance Program

◆ Sustainable Energy Utility (SEU) Incentives

- Home Performance with ENERGY STAR
- Green for Green Program
- Revolving Loan Fund

The energy savings for these incentives need to be appropriated to each utility.

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THANK YOU